UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/808,697	03/25/2004	Scott Goldthwaite	WS-106	6060

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AKC PATENTS
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EXAMINER
GEDRICH, SARAH R

ART UNIT	PAPER NUMBER
3625	

DATE MAILED: 12/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	10/808,697	GOLDTHWAITE ET AL.
	Examiner	Art Unit
	Sarah R. Gedrich	3625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-44* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-44* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>25 March 2004</u> is/are: a)☐ accepted or b)☒ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Priority

1.   Applicant has not complied with one or more conditions for receiving the benefit

of an earlier filing date under 35 U.S.C. 120 as follows:

*   Oath does not include reference to the related US applications.

Appropriate corrections are required.

Drawings

2.   Figure 10 should be designated by a legend such as --Prior Art-- because only

that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in

compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid

abandonment of the application. The replacement sheet(s) should be labeled

"Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct

any portion of the drawing figures. If the changes are not accepted by the examiner, the

applicant will be notified and informed of any required corrective action in the next Office

action. The objection to the drawings will not be held in abeyance.

3.   Applicant is reminded of the proper language and format for an abstract of the
disclosure.

Specification

4.   The abstract should be in narrative form and generally limited to a single

paragraph on a separate sheet within the range of 50 to 150 words. It is important that

the abstract not exceed 150 words in length since the space provided for the abstract

on the computer tape used by the printer is limited. The form and legal phraseology

often used in patent claims, such as "means" and "said," should be avoided. The

abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

5.   The disclosure is objected to because of the following informalities:

   •   The Brief Description of the Drawings does not include Fig. 10.

       Appropriate correction is required.

Claim Objections

6.   Applicant is advised that should claim 25 be found allowable, claim 37 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7.   **Claims 1-2, 7, 11, 14-16, 19-28, 33, 37, 40-43, and 44 are rejected under 35**

U.S.C. 102(e) as being anticipated by Nakamura et al. Patent Application

Publication US 2004/0093309 (hereinafter referred to as "Nakamura").

8.   Nakamura discloses an apparatus, system, and method for electronic ticket

management and electronic ticket distribution authentication. The system includes an

organizer, seller, and platform center connected through a network, and information

stored on a storage chip.

9.   **Referring to claim 1.** Nakamura further discloses:

- A voucher host system adapted to generate said prepaid electronic vouchers: a

  ticket database server for managing data concerning electronic tickets, an

  electronic ticket-operation key server, a security server for

  authenticating/downloading IC cards, and an application server for receiving

  Internet portal services are installed in the electronic ticket platform center

  (Nakamura: paragraph 0123).

- A voucher smart card: A non-contact IC card as an example of the information

  storage ship (Nakamura: paragraph 0120, Fig. 10A).

- A voucher terminal adapted to receive the prepaid electronic vouchers from the

  voucher host system over a network connection and to store the prepaid

  electronic vouchers in the voucher smart card: The electronic ticket issuer issues

  electronic tickets in cooperation with the electronic ticket sellers to the users of

  the information storage chips in which the electronic ticket information is stored

(Nakamura: paragraph 0133). The electronic ticket seller can be a store terminal (Nakamura: paragraph 0134).

10.   **Referring to claim 2.** Nakamura further discloses:

- Transaction server adapted to mediate and aggregate transactions and communications between said voucher terminal and said voucher host system over said network connection: The electronic ticket platform center is formed as a computer, which functions as a web server, so as to provide services to the individual elements of the electronic ticket management system, such as the event organizers, via the network (Nakamura: paragraph 0124).

11.   **Referring to claim 7.** Nakamura further discloses:

- Voucher terminal comprises a wireless communication device: the network may be a wireless or wired network (Nakamura: paragraph 0182).

- A subscriber identification module (SIM) card slot, a smart card reader/writer module electrically connected to said SIM card slot and wherein the smart card reader/writer module is adapted to receive and read/write information stored into said voucher smart card: The reader has a function for reading the ID number of the user and the electronic ticket information from the information storage chip. If the information storage device is a contact IC card, a card reader provided with a card entrance slot and a card exit slot is provided (Nakamura: paragraph 0168). The writer writes new electronic ticket information into the information storage chip of the user who is permitted to buy a ticket by the authentication unit (Nakamura: paragraph 0170).

12.   **Referring to claim 11.** Nakamura further discloses:

- A printer adapted to connect to the voucher terminal for printing hard copies of said prepaid electronic vouchers: The output display prints required information on a medium, such as paper, in response to the purchaser's request (Nakamura: paragraph 0171).

13.   **Referring to claim 14.** Nakamura further discloses:

- Prepaid electronic vouchers comprise data selected from a group consisting of a mobile operator code, a voucher number, a voucher expiration date, said voucher number in an encrypted format, a voucher value, voucher currency code, voucher product code, voucher product description, voucher owner code, and voucher owner: Various types of information that can be indicated in regular paper tickets can be stored in electronic tickets, such as the opening time, the performance start time, the performance name, the performers' names, the name of the event venue, the seat number, the entrance gate, the name of the event organizer, the name of the electronic ticket seller, and the contact name (Nakamura: paragraph 0117). Electronic ticket and event information includes the event ID, the floor, the seat number, the membership number, customer name, the customer attribute, and the date of birth are stored in the information storage chip (Nakamura: paragraph 0337).

14.   **Referring to claim 15.** Nakamura further discloses:

- Prepaid electronic vouchers comprise encrypted data: For ensuring the security, it is preferable that the electronic ticket information stored in the information

storage chip is encrypted in advance when the ticket is purchased by using the

ID number unique to the information storage chip according to an encryption

algorithm (Nakamura: paragraph 0261).

15. **Referring to claim 16.** Nakamura further discloses:

- <u>A voucher encryption smart card wherein the voucher encryption smart card</u>

  <u>comprises a voucher encryption key for decrypting said encrypted data:</u> The

  security protection can be ensured by employing an authentication key technique

  (Nakamura: paragraph 0281).

16. **Referring to claim 19.** Nakamura further discloses:

- <u>Voucher terminal further comprises a first voucher application wherein the first</u>

  <u>voucher application provides retrieving of the stored electronic prepaid vouchers</u>

  <u>from the voucher smart card and printing hard copies of the prepaid electronic</u>

  <u>vouchers:</u> The customer may desire analog information indicated on a paper

  ticket rather than digital information stored in an information storage chip. In this

  case, the electronic ticket information is converted into a paper ticket. Then, the

  paper ticket is issued (Nakamura: paragraph 0253).

17. **Referring to claim 20.** Nakamura further discloses:

- <u>First application further provides decrypting encrypted data stored in the</u>

  <u>electronic prepaid vouchers:</u> The information to be assigned, which is encrypted

  with the ID number of the information storage chip of the assignor customer, is

  decrypted (Nakamura: paragraph 0273).

18. **Referring to claim 21.** Nakamura further discloses:

- Voucher terminal further comprises a second voucher application wherein the second voucher application provides transferring one or more of the stored prepaid electronic vouchers from said voucher smart card to another voucher smart card: Electronic ticket information stored in an information storage chip can be assigned to another information storage chip by using the store terminal (Nakamura: paragraph 0282).

19. **Referring to claim 22.** Nakamura further discloses:

A method for generating and distributing one or more prepaid electronic vouchers issued by a merchant for providing a service or a product, said method comprising:

- Providing a voucher host system adapted to generate said prepaid electronic vouchers: a ticket database server for managing data concerning electronic tickets, an electronic ticket-operation key server, a security server for authenticating/downloading IC cards, and an application server for receiving Internet portal services are installed in the electronic ticket platform center (Nakamura: paragraph 0123).

- Providing a voucher terminal adapted to receive said prepaid electronic vouchers from the voucher host system over a network connection and to store the prepaid electronic vouchers in a voucher smart card: The electronic ticket issuer issues electronic tickets in cooperation with the electronic ticket sellers to the users of the information storage chips in which the electronic ticket information is stored (Nakamura: paragraph 0133). The electronic ticket seller can be a store terminal (Nakamura: paragraph 0134).

- Placing a purchase order and paying for one of the prepaid electronic vouchers from the voucher terminal to the voucher host system over the network connection: The customer, who wishes to purchase electronic tickets, accesses the sales portal site of the electronic ticket seller via the network. Then, the customer sends a ticket purchase request to the sales portal site (Nakamura: paragraph 0233). The electronic ticket fee is first collected from the customers (Nakamura: paragraph 0139).

- Downloading said one prepaid electronic voucher from the voucher host system to the voucher terminal over the network connection and storing the electronic voucher in the voucher smart card: The electronic ticket issuer allows the user of the information storage chip, sold via the electronic ticket seller, to download the corresponding electronic ticket information (Nakamura: paragraph 0135).

- Retrieving the prepaid electronic voucher from the voucher smart card: the customer 140 obtains the electronic ticket (Nakamura: paragraph 0238).

- Presenting the prepaid electronic voucher to the merchant and receiving the service or product: The gate terminal reads the electronic ticket information and the event information stored on the information storage chip, and permits the attendee to enter if the information is valid (Nakamura: paragraph 0321).

20.   **Referring to claim 23.** Claim 23 is rejected on the same rationale as set forth above in claim 2.

21.   **Referring to claim 24.** Claim 24 is rejected on the same rationale as set forth above in claim 11.

22.   **Referring to claims 25 and 37.** Claims 25 and 37 are rejected on the same

rationale as set forth above in claim 14.

23.   **Referring to claim 26.** Claim 26 is rejected on the same rationale as set forth

above in claim 15.

24.   **Referring to claim 27.** Claim 27 is rejected on the same rationale as set forth

above in claim 16.

25.   **Referring to claim 28.** Claim 28 is rejected on the same rationale as set forth

above in claims 16 and 20.

26.   **Referring to claim 33.** Claim 33 is rejected on the same rationale as set forth

above in claim 7.

27.   **Referring to claim 40.** Claim 40 is rejected on the same rationale as set forth

above in claim 19.

28.   **Referring to claim 41.** Claim 41 is rejected on the same rationale as set forth

above in claim 20.

29.   **Referring to claim 42.** Claim 42 is rejected on the same rationale as set forth

above in claim 21.

30.   **Referring to claim 43.** Nakamura further discloses:

- **Transferring a prepaid voucher from a voucher smart card to a second voucher

  smart card:** Electronic ticket information stored in an information storage chip

  can be assigned to another information storage chip by using the store terminal

  (Nakamura: paragraph 0282).

31.   **Referring to claim 44.** Nakamura further discloses:

- <u>Transferring a prepaid voucher from a voucher smart card to a second voucher</u>

    <u>terminal:</u> Information stored in an information storage chip of the assignor

    customer is read by using the store terminal, and is sent to the store terminal

    (Nakamura: paragraph 0284).

Claim Rejections - 35 USC § 103

32.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

33.   Claims 4, 17, 30 and 38 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Nakamura in view of Wen et al. Patent Application Publication

US 2004/0143730 (hereinafter referred to as "Wen").

34.   Nakamura discloses the system above. Nakamura fails to disclose the smart

card comprising a HSM selected from a group consisting of microprocessors and

storage accessories, and a voucher encryption key is selected from a group consisting

of a personal identification number (PIN), a private key, a public key, a symmetric key

and an asymmetric key. Wen discloses a universal secure messaging for remote

security tokens.

35.   **Referring to claim 4.** Wen further disclose

- <u>The smart card comprising a HSM selected from a group consisting of</u>

    <u>microprocessors and storage accessories:</u> The security tokens include

    subscriber identification modules, personal security devices, secure application

modules, smart cards, and hardware security modules (Wen: paragraph 0010).

At least one token remote access application is installed in the token memory

(Wen: paragraph 0076).

It would have been obvious to one of ordinary skill in the art at the time of the invention

to modify Nakamura to include the smart card comprising a HSM selected from a group

consisting of microprocessors and storage accessories as taught by Wen in order to

allow the security token to establish a secure end-to end communication connection in

conjunction with the security token enabled computer system (Wen: paragraph 0077).

36.   **Referring to claim 17.** Wen further discloses:

- <u>Voucher encryption key is selected from a group consisting of a personal</u>

    <u>identification number (PIN), a private key, a public key, a symmetric key and an</u>

    <u>asymmetric key:</u> In high security operating environments, it is specified that

    critical security parameters (CSP) such as authentication data, passwords, PINs,

    CSPs, biometric samples, secret and private cryptographic keys be entered into

    or output from a security token in an encrypted form (Wen: paragraph 0090).

    The security token includes an EEPROM that further includes a runtime

    operating environment, cryptography extensions incorporated into the operating

    system and capable of performing symmetric and asymmetric cryptographic

    functions compatible with the intelligent remote device and security token

    enabled cryptography software (Wen: paragraph 0069).

It would have been obvious to one of ordinary skill in the art at the time of the invention

to modify Nakamura to include a voucher encryption key is selected from a group

consisting of a personal identification number (PIN), a private key, a public key, a

symmetric key and an asymmetric key as taught by Wen in order to authenticate the

security token and the enabled computer system and allow for communication (Wen:

paragraph 0042).

37.   **Referring to claim 30.** Claim 30 is rejected on the same rationale as set forth

above in claim 4.

38.   **Referring to claim 38.** Claim 38 is rejected on the same rationale as set forth

above in claim 17.

39.   **Claims 3 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable**

over Nakamura in view of Wen in further view of Teicher US Patent No. 6,467,685.

40.   The combination of Nakamura and Wen discloses the system above. The

combination fails to disclose voucher smart card comprises a removable smart card

selected from a group consisting of a "full size" smart credit card, a "full size" smart

debit card, a "plug-in" Subscriber Identification Module (SIM) smart card, a "plug-in"

Secure Access Module (SAM) smart card, a contactless smart card, a stored-value

card, a coupon card, a reward card, an electronic cash card, a loyalty card, an

identification card and combinations thereof. Teicher discloses a countable electronic

monetary system and method. The system allows for central monitoring of electronic

coins and bills.

41.   **Referring to claim 3.** Teicher further discloses:

* A voucher smart card comprises a removable smart card selected from a group

  consisting of a "full size" smart credit card, a "full size" smart debit card, a "plug-

in" Subscriber Identification Module (SIM) smart card, a "plug-in" Secure Access

Module (SAM) smart card, a contactless smart card, a stored-value card, a

coupon card, a reward card, an electronic cash card, a loyalty card, an

identification card and combinations thereof: Nakamura discloses a smart card

that is a contact or non-contact IC card (Nakamura: paragraph 0119). Wen

discloses smart cards subscriber identification modules, secure application

modules, personal security devices, identification tokens, and the like (Wen:

paragraph 0010). The combination fails to include stored-value cards, coupon

cards, reward cards, electronic cash cards, and loyalty cards. The stored-value

systems store the electronic value that is defines as value in a form that can be

transferred to and stored in a consumer or merchant electronic storage device.

The term "value" herein denotes any accumulated and transferable measure of

worth, including but not limited to: money, cash, currency, or the equivalent

thereof; loyalty points, airmiles, or other rewards or recognitions; barter credit or

scrip; and coupons, such as discount coupons. The term "electronic cash"

herein denotes an embodiment of electronic value that represents cash money or

the equivalent thereof (Teicher: Column 2, lines 20-35).

It would have been obvious to one of ordinary skill in the art at the time of the invention

to modify the combination of Nakamura and Wen to include stored-value cards, coupon

cards, reward cards, electronic cash cards, and loyalty cards as taught by Teicher in

order to denote any accumulated and transferable measure of worth (Teicher: Column

2, lines 24-26).

42.   <u>Referring to claim 29.</u> Claim 29 is rejected on the same rationale as set forth

above in claim 3.

43.   **Claims 5-6, 31 and 32 are rejected under 35 U.S.C. 103(a) as being**

unpatentable over Nakamura in view of Armes Patent Application Publication US

2001/0034720.

44.   Nakamura discloses a wired or wireless terminal including a smart card

reader/writer. Nakamura fails to discloses the wired or wireless terminal as a

communication device selected from a group consisting of a mobile phone, a personal

digital assistant (PDA), a pager, a point of sale (POS) terminal, a television remote

control, a personal computer and combinations thereof. Armes discloses a system for

facilitating a transaction.

45.   <u>Referring to claims 5 and 6.</u> Armes further discloses:

- <u>A communication device selected from a group consisting of a mobile phone, a</u>

  <u>personal digital assistant (PDA), a pager, a point of sale (POS) terminal, a</u>

  <u>television remote control, a personal computer and combinations thereof:</u> The

  cardholder may interact with the card provider's transaction system or a

  merchant via any input device such as a telephone, keyboard, mouse, kiosk,

  personal digital assistant, touch screen, voice recognition device, transponder,

  biometrics device, handheld computer (e.g., Palm Pilot.RTM.), cellular phone,

  web TV, web phone, blue tooth/beaming device and/or the like. Similarly, the

  invention could be used in conjunction with any type of personal computer,

  network computer, workstation, minicomputer, mainframe, or the like running any

operating system such as any version of Windows, Windows NT, Windows2000, Windows 98, Windows 95, MacOS, OS/2, BeOS, Linux, UNIX, or the like (Armes: paragraph 0040).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Nakamura to include communication devices as taught by Armes in order to allow the card holder to interact with the card provider or merchant via any input device (Armes: paragraph 0040).

46.   **Referring to claims 31 and 32.** Claims 31 and 32 are rejected on the same rationale as set forth above in claims 5 and 6.

47.   **Claims 8-9, 34 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura in view of Barnes, JR. Patent Application Publication US 2003/0065805 (hereinafter referred to as "Barnes").**

48.   Nakamura discloses the system above. Nakamura fails to disclose the network selected from a group consisting of the Internet, a telecommunications network, a WWAN, a WLAN, a PAN, and a private communication network and a wireless wide area network (WWAN) is selected from a group consisting of a Global System for Mobile Communications (GSM), General Packet Radio Service (GPRS), a Code Division Multiple Access (CDMA), CDMA 2000, and wideband CDMA (WCDMA). Barnes discloses a system, method, and computer program product for providing location based services, and mobile e-commerce. The system provides for selecting one of a plurality of network through which to communicate.

49.   **Referring to claim 8.** Barnes further discloses:

- <u>Network is selected from a group consisting of the internet, a telecommunications</u>

  <u>network, a wireless wide area network (WWAN), a wireless local area network</u>

  <u>(WLAN), a personal area network (PAN) and a private communication network:</u>

  Nakamura discloses a network that can be public, or closed and wired or

  wireless and includes the Internet, LANs, and an intranet (Nakamura: paragraph

  0182). Barnes further discloses the device is configured to operate with a

  conventional mobile telephone network or wireless wide area network (WWAN),

  and one or more other wireless local area networks (wireless LAN or WLAN),

  wireless Metropolitan Area Networks (MAN), and a wireless personal area

  networks (PAN)(e.g., a Bluetooth.RTM.network) (Barnes: paragraph 0044).

It would have been obvious to one of ordinary skill in the art at the time of the invention

to modify Nakamura to include a network that is selected from a group consisting of the

internet, a telecommunications network, a wireless wide area network (WWAN), a

wireless local area network (WLAN), a personal area network (PAN) and a private

communication network as taught by Barnes in order to allow the device to wirelessly

communicate with printers, exchange payment information wirelessly, etc (Barnes:

paragraph 0049).

50.   **Referring to claim 9.** Barnes further discloses:

- <u>A wireless wide area network (WWAN) is selected from a group consisting of a</u>

  <u>Global System for Mobile Communications (GSM), General Packet Radio</u>

  <u>Service (GPRS), a Code Division Multiple Access (CDMA), CDMA 2000, and</u>

  <u>wideband CDMA (WCDMA):</u> Networks employing at least some of the 3G

standard include CDMA-2000 based services (e.g., CDMA 1XRTT, CDMA 2000

1XEV) (CDMA refers to Code-Division Multiple Access), FOMA (Freedom of

Mobile Multimedia Access), and Wideband CDMA (Barnes: paragraph 0057).

Common 2.5G networks include General Packet Radio Service (GPRS) and

Enhanced Data for GSM (Global System for Mobile Communications) Evolution

(Edge) also referred to as Enhanced Data Rates for Global Evolution and

Enhanced Data GSM Environment (Barnes: paragraph 0058).

It would have been obvious to one of ordinary skill in the art at the time of the invention

to modify Nakamura to include a wireless wide area network (WWAN) is selected from a

group consisting of a Global System for Mobile Communications (GSM), General

Packet Radio Service (GPRS), a Code Division Multiple Access (CDMA), CDMA 2000,

and wideband CDMA (WCDMA) as taught by Barnes in order to allow the device to

receive incoming transmissions as they are sent with the packet-switched network and

"always on" capabilities (Barnes: 0057).

51.   **Referring to claim 34.** Claim 34 is rejected on the same rationale as set forth

above in claim 8.

52.   **Referring to claim 35.** Claim 35 is rejected on the same rationale as set forth

above in claim 9.

53.   **Claims 10 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable**

over Nakamura in view of Barnes in further view of Nguyen Patent Application

Publication US 2003/0172145.

54.   The combination of Nakamura and Barnes fails to discloses communication

formats. Nguyen discloses a system and method for designing, developing, and

implementing Internet service provider architectures.

55.   **Referring to claim 10.** Nguyen further discloses:

- Communications comprise a format selected from a group consisting of Short

  Message Service (SMS), General Packet Radio Service (GPRS), Transmission

  Control Protocol/Internet Protocol (TCP/IP), User Datagram Protocol (UDP),

  Simple Mail Transmission Protocol (SMTP), Simple Network Management

  Protocol (SNMP), and proprietary message formats: Barnes discloses common

  2.5G networks include General Packet Radio Service (GPRS) (Barnes:

  paragraph 0058). Nguyen further discloses a Short Messaging Service (SMS)

  may be used by subscribers to send text messages (Nguyen: paragraph 0471).

  Simple mail transfer protocol (SMTP), for example, may be offered for sending

  mail (Nguyen: paragraph 0547). Intelligent agents may be installed on all

  Internet architecture components. These agents may be accessed via standard

  protocols, such as SNMP, CMIP, DMI, and JMAPI from a centralized console

  (which may also be viewed securely on remote, heterogeneous clients, if

  desired) (Nguyen: paragraph 0864). Packet filtering routers may be the first line

  of defense, and allow packets to be routed based on source and destination IP

  addresses, and also based on source and destination TCP or UDP port numbers

  (Nguyen: paragraph 0911).

It would have been obvious to one of ordinary skill in the art at the time of the invention

to modify the combination Nakamura and Barnes to include communication formats as

taught by Nguyen in order to allow ISP to provide new channels for their services and

provide and opportunity to reach new subscribers (Nguyen: paragraph 007).

56.   **Referring to claim 36.** Claim 36 is rejected on the same rationale as set forth

above in claim 10.

57.   **Claims 12 and 13 rejected under 35 U.S.C. 103(a) as being unpatentable**

over Nakamura in view of Deng et al. US Patent No. 6,795,327 (hereinafter referred

to as "Deng").

58.   Nakamura discloses the system above. Nakamura fails to disclose the printer

connection. Deng discloses a semiconductor storage method and device supporting

multi-interface. Deng's system includes an interface module that supports at least two

interfaces of different standards.

59.   **Referring to claims 12 and 13.** Deng further discloses:

- Printer is connected to said voucher terminal via a wired connection selected

  from a group consisting of a serial connection, a parallel connection, a USB

  connection and a mini USB connection or a wireless connection selected from a

  group consisting of infrared, Bluetooth, 801.1x, and short-range radio frequency

  (RF) connections: The serial or parallel or wireless communication interfaces

  can be CF (Compact Flash), USB (Universal Serial Bus), IEEE 1394, PCMCIA,

  True IDE, Bluetooth interfaces or wireless LAN interface (Deng: Column 3, lines

  63-67).

It would have been obvious to one of ordinary skill in the art at the time of the invention

to modify Nakamura to include the printer connection as taught by Deng in order to

provide a convenient mobile storage device for the data processing systems using

different interfaces, enabling the simple and easy exchange of data and files between

different kinds of data processing system, thus reducing the configuration costs (Deng:

Column 2, lines 45-50).

60.   Claims 18 and 39 rejected under 35 U.S.C. 103(a) as being unpatentable

over Nakamura in view of England et al. Patent Application Publication US

2003/0200450 (hereinafter referred to as "England").

61.   Nakamura discloses the system above. Nakamura fails to disclose the

techniques used for decryption. England discloses saving and retrieving data based on

a public key encryption.

62.   **Referring to claim 18.** England further discloses:

- Decrypting utilizes techniques selected from a group consisting of symmetric

    keys, asymmetric keys, data encryption standard (DES, 3DES), RSA, elliptical

    curve cryptography (ECC), message authentication codes (MAC), HMAC, SHA-I,

    AES, and public key infrastructure (PKI): The digest can be generated in any

    wide variety of conventional manners, such as using any one or more of a variety

    of cryptographic hash functions, such as, SHA1, MAC, and so forth (England:

    paragraph 0047). Symmetric encryption algorithms use the same key for

    encryption and decryption, such as DES, 3DES, AES, and so forth (England:

    paragraph 0071). If the device is to be recognized as part of a PKI, the

manufacturer should also certify a public key for the platform (England: paragraph 0127). England also discloses using RSA key pairs (England: paragraph 0140).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Nakamura to include decrypting techniques as taught by England in order to allow the encrypted data to be decrypted and the message authenticated with the MAC (England 0080).

63.   **Referring to claim 39.** Claim 39 is rejected on the same rationale as set forth above in claim 18.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sarah R. Gedrich whose telephone number is (703) 306-5449. The examiner can normally be reached on M-F 7:30am - 5:00pm, alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wynn Coggins can be reached on (703) 308-1344. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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